

**QA: QA**

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
OFFICE OF QUALITY ASSURANCE**

**AUDIT REPORT  
OF THE  
OFFICE OF REPOSITORY DEVELOPMENT**

**AT  
LAS VEGAS, NEVADA**

**DECEMBER 2-6, 2002**

**Prepared by:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
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**Approved by:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**R. Dennis Brown**  
**Director**  
**Office of Quality Assurance**

## **1.0 EXECUTIVE SUMMARY**

Results of internal audit YMSCO-ARC-02-12 conducted by the Office of Quality Assurance (OQA) of the Office of Repository Development (ORD) revealed that applicable portions of the DOE/RW-0333P, Revision 12, *Quality Assurance Requirements and Description* (QARD) and corresponding procedures are being satisfactorily implemented, except as noted. Based on the objective evidence reviewed, the team identified several notable practices and two conditions adverse to quality.

Noteworthy practices included ORD being better prepared for the audit this year, improving their interface with the audit team, fostering an environment of self-identification/correction of deficient conditions (including improving the self-assessment process) and developing management tools used for assuring procurement procedural requirements were followed.

Two conditions adverse to quality, one in Section 5.0, "Implementing Documents," and one in Section 17.0, "Quality Assurance Records" are detailed further in this report. The first condition, documented in Deficiency Report (DR) number ORD(O)-03-D-048, addresses the lack of a procedure for the process used to redirect contract effort and interpreting technical portions of work. The use of Technical Direction Letters, for this process, on Contract No. DE-AC28-01RW12101 with Bechtel SAIC Company, LLC (BSC) is not addressed in current procedures. The second condition was considered isolated and was corrected during the audit. It was documented on Observation Report number ORD(O)-03-O-036 and involved an incorrect cross-reference accession number on one record.

The audit team evaluated the effectiveness of the corrective actions for four DRs and one Deficiency Identification and Referral (DIR). The audit team determined the corrective actions to be effective on all but one DR. However, the ineffective corrective action associated with this DR was self-identified by ORD and further action is underway to resolve the condition.

## **2.0 SCOPE**

The audit team conducted a compliance-based audit of the ORD in Las Vegas, Nevada. The audit team, through interviews of cognizant personnel, reviews of documentation, and evaluation of procedures, assessed the adequacy and effectiveness of implementation of the applicable portions of the Office of Civilian Radioactive Waste Management (OCRWM) QARD.

The audit team reviewed the status of closed deficiency documents, issued as a result of the previous OQA audit, to determine the effectiveness of completed corrective actions by ORD.

The following QA Program Sections were evaluated:

**QARD Program Sections**

1.0	Organization
2.0	QA Program
3.0	Design Control
4.0	Procurement Document Control
5.0	Implementing Documents
6.0	Document Control
7.0	Control of Purchased Items and Services
16.0	Corrective Action
17.0	QA Records
Supplement II	Sample Control
Supplement III	Scientific Investigation
Supplement V	Control of Electronic Management of Data

**3.0 AUDIT TEAM**

Marilyn A. Kavchak, Navarro Quality Services (NQS)/Audit Team Leader  
John R. Doyle, NQS/Auditor  
Donald J. Harris, NQS/Auditor  
Robert A. Toro, NQS/Auditor

The audit team was observed by Robert Latta, U.S. Nuclear Regulatory Commission, Las Vegas, Nevada.

**4.0 AUDIT TEAM MEETINGS AND PERSONNEL CONTACTED**

A pre-audit meeting was conducted at ORD offices in Las Vegas on Monday, December 2, 2002. Daily debriefings were held to apprise ORD management and staff of the progress of the audit and any identified conditions adverse to quality. A post-audit meeting was conducted at the same location on Friday, December 6, 2002. Personnel contacted during the audit, including those who attended the pre-audit and post-audit meetings, are listed in Attachment 1, "Personnel Interfaces."

**5.0 SUMMARY OF AUDIT RESULTS**

**5.1 Program Effectiveness**

The audit team concluded that, based on the objective evidence reviewed and with the exception of those areas where conditions adverse to quality were identified, the ORD is satisfactorily and effectively implementing the applicable portions of the QARD.

## **5.2 Audit Activities**

Attachment 2, “Summary Table of Audit Results,” provides results for each QARD Section audited. The details of the audit, including the objective evidence reviewed, are documented in the audit checklist. The completed, approved checklist is maintained as a QA record.

In addition to the check-listed items and during the course of the audit, it was suggested that the use of Work Authorization Directives/Documents (WADs), which initiates specific work activities, some of which are quality-affecting, be clarified in LP-4.1Q, *Procurement Actions*. Also, discussions were held with management on ways to improve the training matrix, verification of education and experience form for federal employees and the position descriptions.

## **5.3 Summary of Conditions Adverse to Quality**

The audit identified conditions adverse to quality, which resulted in one DR, and one Quality Observation.

Synopses of the documented conditions adverse to quality are detailed below. The DR has been transmitted to ORD under separate letter.

### **5.3.1 Deficiency Reports**

**ORD(O)-03-D-048** - ORD has established a process that is not proceduralized, in addition to the formal procurement document process, to provide technical direction to BSC. Technical Direction, according to Contract No. DE-AC28-01RW12101, includes the redirection of contract effort, shift of work emphasis between work areas, and interpreting technical portions of the work description. Although the process in place appears to provide a methodology for tracking contract interpretations, there is no assurance that quality and technical changes or interpretations are subject to the same degree of control as the original procurement document. The QARD, in Section 4.2.3 requires that specified changes be subject to the same control as the original Procurement Document.

### **5.3.2 Quality Observations**

The Quality Observation is used, based on the auditor’s discretion, to document a minor condition adverse to quality requiring only remedial action that has no residual impact and that is expected to be corrected within 30 days. The Quality Observation documented during this audit was corrected during the audit and is considered closed.

**ORD(O)-03-O-036** - identifies that a cross-referenced accession number (MOL.1990830.0332) on the ORD Signature and Initials List record (MOL.20010927.0397) was incorrect. It was revised to reference the correct number, MOL.1990830.0322.

### **5.3.3 Follow-up of Previously Issued Deficiency Documents**

**YMSCO-01-D-138** - described a lack of training for work subject to the QARD. A review of corrective action associated with this DR indicated ineffective implementation. However, ORD had self-identified the lack of implementation during Self Assessment SA-OPS-2002-05 and documented the repetitive deficiency as DR YMSCO(O)-02-D-180 on 10/4/02. This recent DR remains open.

**YMSCO-02-D-139** - documented the lack of objective evidence of reviews and/or comment resolution for Q deliverables as required by AP-7.5Q, Revision 0, ICN 2, BSCN 1, *Submittal, Review, and Acceptance of Deliverables*. Documentation associated with Q deliverables were available as evidence of review and comment resolution associated acceptance. A sample of five Fiscal Year 2002 deliverables was reviewed and found acceptable.

**YMSCO-02-D-140** - was written to document discrepancies noted between the identification of document owners whereby the OCRWM Program Documents Database and the Document Control Action Requests were different for two noted procedures (AP-6.1Q, Revision 6, ECN 1, *Controlled Distribution* and AP-17.1Q, Revision 2, ICN 0, *Record Source Responsibilities for Inclusionary Records*. Twelve recent procedure changes were reviewed and no similar problems were found. Based on this sample review, corrective action is considered effective.

**YMSCO-02-D-141** - addressed the lack of objective evidence of documentation of comments and comment resolution associated with procurement requirement packages. A sample of seven procurement requirement packages generated in Fiscal Year 2002 was reviewed and no recurrence was found. Comment and comment resolution documentation was maintained. Based on the review, effective corrective action was apparent.

**YMSCO-01-D-128, including DIR 01-08** - The Requirements Traceability Network (RTN) did not contain the required information as specified in AP-5.1Q, Revision 2, *Plan and Procedure Preparation, Review, and Approval*. A review of a RTN Report (012) was conducted and found to contain all the information required by procedure.

## **6.0 LIST OF ATTACHMENTS**

Attachment 1, "Personnel Interfaces"

Attachment 2, "Summary Table of Audit Results"

### ATTACHMENT 1 PERSONNEL INTERFACES

Name	Organization	Pre-Audit Meeting	Contacted During Audit	Post-Audit Meeting
Arthur, W. John	DOE/ORD			X
Blaylock, James	DOE/OQA	X	X	X
Boyle, William	DOE/ORD			X
Brown, R. Dennis	DOE/OQA			X
Clark, Robert W.	DOE/ORD		X	
Coleman, Drew	DOE/ORD		X	
Compton, James R	DOE/ORD		X	
Cooper, Emily	DOE/ORD	X	X	
Dyer, J. Russell	DOE/ORD	X		X
Elder, Kenneth	DOE/ORD			X
Gil, April	DOE/ORD	X	X	
Gilbert, Lenora	DOE/ORD		X	
Glasser, William	NQS		X	
Glover, Marcelle	DOE/ORD		X	
Hamilton-Ray, Birdie	DOE/ORD	X	X	X
Hampton, Catherine	DOE/ORD	X	X	
Harrington, Paul	DOE/ORD		X	
Hasson, Robert	NQS	X	X	
Iori, Vincent F.	DOE/ORD	X	X	
James, Reggie	DOE/ORD		X	
Kirby, Deborah	MTS	X	X	X
Kettell, Richard	NQS		X	
Kratzinger, Frank	MTS	X		
Latta, Robert	NRC	X	X	X
Lewis, Chris	BSC		X	
Mele, Raymond	MTS	X	X	
Mellington, Suzanne	DOE/ORD			X
Miller, Wayne	DOE/ORD		X	
Opelski, Edward	NQS			X
Parrott, Jack	NRC			X
Savino, John	DOE/ORD		X	
Smistad, Erik	DOE/ORD		X	
Spence, Richard	DOE/ORD	X	X	

Name	Organization	Pre-Audit Meeting	Contacted During Audit	Post-Audit Meeting
Trebules, Victor	DOE/ORD	X		
Van Der Puy, Mark	DOE/ORD	X		
Verden, Janice	MTS		X	
Wagner, Lester	NQS	X	X	X
Warriner, David	DOE/ORD	X	X	X
White, Jon	DOE/ORD		X	
Williams, Albert	DOE/OQA			X
Wooley, W. Jake	DOE/ORD	X	X	
Young, Fran	DOE/ORD		X	

Legend:

BSC	Bechtel SAIC Company, LLC	NQS	Navarro Quality Services
DOE	U.S. Department of Energy	ORD	Office of Repository Development
OQA	Office of Quality Assurance	NRC	Nuclear Regulatory Commission
MTS	Management & Technical Support Services		



## ATTACHMENT 2 SUMMARY TABLE OF AUDIT RESULTS

QA Program Section	Implementing Documents	Details (✓) List	Deficiency Reports	Quality Observations	Recommendations	Program Adequacy	Procedure Compliance	Overall
1	LP-1.1-OCRWM REV 0, ICN 0	Page 1-2	N	N	N	SAT	SAT	SAT
2	AP-2.1Q REV 2, ICN 1	Page 3-5	N	N	N	SAT	SAT	SAT
	AP-2.2Q REV 1, ICN 0	Pages 6-7	N	N	N	SAT	SAT	
	AP-2.20Q REV 1, ICN 0	Page 8-10	N	N	N	SAT	SAT	
	AP-2.22Q REV 0, ICN 0	Pages 11-12	N	N	N	SAT	SAT	
3	AP-3.9Q REV 1, ICN 1	Pages 13	N/I	N/I	N/I	N/I	N/I	N/I
4	LP-4.1Q-OCRWM REV 2, ICN 0	Pages 14-18	Y*	N	N	UNSAT*	SAT	SAT
	LP-4.2Q-OCRWM REV 0, ICN 1	Pages 19-22	N/I	N/I	N/I	N/I	N/I	
5	AP-5.1Q REV 3, ICN 3	Pages 23-27	ORD(O)-03-D-048	N	N	UNSAT	SAT	SAT

QA Program Section	Implementing Documents	Details (✓) List	Deficiency Reports	Quality Observations	Recommendations	Program Adequacy	Procedure Compliance	Overall
6	AP-6.1Q REV 6, ICN 5	Pages 28-31	N	N	N	SAT	SAT	SAT
	AP-6.28Q REV 0, ICN 1	Pages 32-34	N	N	N	SAT	SAT	
7	AP-7.5Q REV 1 ICN 0	Pages 35-38	N	N	N	SAT	SAT	SAT
16	AP-16.1Q REV 5, ICN 0	Pages 39-40	N	N	N	SAT	SAT	SAT
17	AP-17.1Q REV 2 ICN 3	Pages 41-45	N	<b>ORD(O)-03-O-036</b>	N	SAT	SAT	SAT
SII	AP-SII.2Q REV 0, ICN1	Pages 46-47	N	N	N	SAT	SAT	SAT
SIII	AP-SIII.2Q, REV 0, ICN 4	Pages 48-49	N	N	N	SAT	SAT	SAT
SV	Control of the Electronic Management of Data	N/I	N/I	N/I	N/I	N/I	N/I	N/I
<b>TOTAL</b>		<b>49</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>

*\* Refer to Deficiency identified as procedural inadequacy in QA Program Section 4*

Legend:      N      None      UNSAT      Does Not Satisfy Criteria  
                  N/I      Not Implemented      Y      Associated Deficiency  
                  SAT      Satisfies Criteria